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Control and Protection of Knowledge in the Information Technology Business

An essay within the project Management of IT-structures

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Abstract

The most important asset in the society today is knowledge. This essay is about the handling of knowledge in information technology companies. I will discuss how companies can control and protect knowledge in the company. The knowledge-based companies are dependent on their personnel and their knowledge, and, if the companies not succeed in recruiting, motivating and retaining it, the company most certainly will lose the competitive advantage they have gained in the market. The essay will threat issues concerning these circumstances between employer and employee.

There are a number of methods that can be used by an employer to control and protect knowledge. First of all, control and protection can be achieved through the employment contract by enclosing restrictive covenants, secrecy clauses and other contractual conditions. Secondly, law can achieve it, some laws forces the employee not to disclose information connected to the employment. Thirdly, incentives and different types of reward system can control the personnel and protect the knowledge thereby. The system can consist of cash payments and other financial instruments related to valuable documents.

When using different instruments to control and protect knowledge it is important for the management to be aware of the consequences of using specific instruments. The use of legal tools, such as different contractual conditions, might be seen as a threat to the employees and should therefore be used with caution. The use of financial instruments can raise a few problems too. Reward systems effect the behaviour of the employees, and the management should only reward actions that give something in return. The rewards shall also work as an incentive for the employees; they shall put the company's interest first. This can be achieved by using stock related instruments, since then the goals of the company and employees are coincident.

The instruments to control and protect knowledge shall be a part of the overall strategy of the company. The external and internal consequences of using them must be examined thoroughly to work out an efficient strategy. The consequences can be legal and financial. The reason why it is important to analyse the strategic consequences is that they can have great impact on the company as a whole.

Contents

1	Introduction	5
2	Purpose	6
3	Method.....	7
4	The New Society	7
4.1	<i>The Knowledge-based Company.....</i>	9
5	The Concept of Knowledge	9
5.1	<i>Lack of Precision</i>	10
5.2	<i>Economic Value.....</i>	11
5.3	<i>Connect the Knowledge to the Company.....</i>	11
5.3.1	<i>Networks</i>	12
5.4	<i>Organisation</i>	13
5.5	<i>The Power in Knowledge-based Companies.....</i>	13
5.6	<i>Conclusion</i>	14
6	Control and Protection of Knowledge	14
6.1	<i>Obligations of the Employee.....</i>	15
6.2	<i>Control and Protection during the Employment</i>	15
6.2.1	<i>The Duty to be Loyal.....</i>	15
6.2.2	<i>Professional Secrecy</i>	16
6.2.3	<i>Obligation not to Compete</i>	16
6.3	<i>Control and Protection after the Termination of the Employment.....</i>	17
6.3.1	<i>Control and Protection by Agreement.....</i>	17
6.3.1.1	<i>Restrictive Covenants.....</i>	17
6.3.1.2	<i>The 1969 Agreement regarding Restrictive Covenants</i>	18
6.3.1.3	<i>Validity of Restrictive Covenants</i>	19
6.3.1.4	<i>Restrictive Covenants in Case Law.....</i>	19
6.3.1.5	<i>Secrecy Agreements.....</i>	20
6.3.1.6	<i>Practical Use of Restrictive Covenants and other Contractual Conditions</i>	20
6.3.1.7	<i>Strategic Use of Agreements to Control and Protect Knowledge.....</i>	21
6.3.2	<i>Control and Protection by Law.....</i>	23
6.3.2.1	<i>The Act on the Right to Employee's Inventions (AUL).....</i>	23
6.3.2.2	<i>Strategic Use of the Act on the Right to Employee's Invention</i>	24
6.3.2.3	<i>Act on Protection of Trade Secrets (FHL)</i>	24
6.3.2.4	<i>The Relation between the Act on Protection of Trade Secrets and Restrictive Covenants</i>	26
6.3.2.5	<i>Strategic Use of the Act on Protection of Trade Secrets</i>	27
6.4	<i>Conclusion</i>	28
7	Incentive Structures and Reward Systems.....	28
7.1	<i>Reward Strategy</i>	29
7.1.1	<i>Components of the Reward Strategy</i>	31
7.1.2	<i>Monetary Rewards</i>	31
7.1.2.1	<i>Monetary Rewards related to Valuable Documents.....</i>	33
7.1.2.2	<i>Tax Consequences</i>	35

7.1.3	Non-monetary Rewards	36
7.2	<i>Implementation of the Reward Strategy/System</i>	37
7.3	<i>Efficient Reward Systems</i>	38
8	Conclusions	39
	Bibliography.....	41

1 Introduction

According to a research study¹ made by Forrester Research² 90 % of Europe's information technology companies suffer from lack of competence. 2/3 of these companies say, as a result of this lack of competence many projects are delayed and they have problems with delivering products and services on time. The companies regard the delay as a significant problem and they say that there is a risk that the delay will be longer than a year.

According to Forrester Research the structural lack of competence is a critical problem for Europe, and the employers have to listen to the employees to greater extent. The employer must be aware of the employee's wishes and opinions regarding the working environment. He also has to create good incentives in order to make the employees remain with the company.

The managing director of SITO,³ Ann-Marie Nilsson, says that in the knowledge based society the most important questions are how to recruit, train, develop and retain competent co-workers.⁴ The significance of good working conditions together with an effective reward system has increased; this has also been realised by many of the companies in the information technology business. It is also important to create good conditions for the companies in the information technology business in order to make them motivate and reward the employees. The research study refers to Europe and Ann-Marie Nilsson is not sure that the situation applies completely to Sweden, but it must be regarded as real and taken seriously.

The question of handling knowledge and the information technology business has been discussed a lot over the last few years. One of the reasons why is that these companies are standing for something new — new structures evolve and old patterns are erased. The changing structures make the situation very interesting in the sense that companies and people behave and respond differently to certain behaviours. The traditional form of business has changed to become somewhat more elastic and immaterial. For this reason the old structures no longer work the way they have in the past. Other problems and opportunities arise. Investors are eager to put in money into information technology companies even though no one really knows what is going to happen with them. Many companies are based on a very good idea, which has not been put to practical use, but still they attract a lot of investors. Many people regard this as an uncertainty since the investors really don't know what they are investing in; the risk is very substantial. The legal and economic world must therefore, to avoid problems, try to build some structures around the phenomenon of knowledge that materialise it.

This essay is about information technology companies and the handling of knowledge in Sweden. For these types of companies this determines their survival, since failing to take care of their personnel will cause them to lose their most important asset — the knowledge. What I am going to discuss in this essay is the control and protection of knowledge, how companies can protect themselves from loss of personnel and, thereby, loss of knowledge and competitive strength. This might be an impossible task, but it is very important for the management to be aware of the issues involved. The management and the owners of the company must treat

¹ The study is called "Peopling Europe's eT Strategies" (eT = External Technologies).

² <http://www.forrester.com/ER/Press/Release/0,1769,189,FF.html> 1999-12-02.

³ IT-företagen, an organisation for companies in the information technology business.

⁴ <http://www.sito.se/main.asp?typ=dok&id=1719&bk=220> 1999-12-02.

their personnel in a good way in order to make them stay with the company and give their best performance. The companies have to become less dependent of individuals. This is perhaps the most important part of knowledge management. Without any personnel, no knowledge can grow and develop to make the company successful and competitive. The focus will be on Swedish conditions both when it comes to the market- and the legal situation. The questions have however international importance and cannot be regarded as a national problem.

In order to create an environment where knowledge can prosper and grow the management can apply a variety of equally successful methods. There is no single method that can be applied to every company. The company must analyse its own needs and form a structure on its own in order to achieve the most. I will point out a few methods that can be used. All methods have their advantages and disadvantages. It is up to the company itself to decide what to do in order to achieve its own goals. I will also discuss how the companies can behave towards legal and economic structures in order to create strategies of protection and controlling knowledge and how to make the strategy a part of the overall corporate strategy.

In chapters 2 and 3 I will present the purpose of the essay and the method used to reach my results and conclusions. In chapter 4 I will describe our new society and the way the society has changed. In this chapter I will also attempt to define the concept of a knowledge-based company. The problems about the concept of knowledge will be discussed briefly in chapter 5, where I will point out complications caused by uncertainty around the concept. Chapter 6 will deal with the legal protection of knowledge; here I will discuss different contractual conditions and law that can be used to protect a company's knowledge.

If chapter 6 represents the stick or whip, chapter 7 will represent the use of carrots as a tool to protect the knowledge in a company. While these two chapters shall be seen as opposite measures both designed to achieve the same thing, I don't think that they are contradictory in any way. Probably they can be used together at the same time. Throughout the essay I will present empirical studies that I have done during the production stages of this essay.

Conclusions will be presented in chapter 8.

2 Purpose

The purpose of this essay is to describe and analyse how a company in the information technology business can protect itself from loss of knowledge, and how they can control the knowledge. I will discuss some different methods to do this. I will also point out the concurrence between different types of methods in dealing with the controlling and protection of knowledge. The methods may not be applicable to all companies; therefore I will also discuss some key questions that the management have to consider. The most important sections of the essay are where I analyse the strategic consequences of the company's behaviour. It is very important to be aware of that certain behaviour can have great legal and financial impact on the company as a whole. I will also discuss and analyse the use of legal tools to make employees behave in a certain way.

It is not my intention to describe or analyse all the methods of protecting and controlling knowledge in detail. In some cases I will only point out a method's existence without any further discussion; I do this to present a general picture of the opportunities at hand without focusing on single phenomena.

3 Method

The work has been done in a project group called Law Management and Corporate Governance at the Institution of Law at the School of Economics and Commercial Law at Gothenburg University. The time period has been from September 1999 until January 2000.

I have in effect used traditional legal sources in my work to create this essay, such as legal books, legal journals and articles. I have also used preparatory works and cases. The Internet has helped me especially in early research. Since the subject of the essay is extremely current, ordinary daily papers have also helped to provide a general picture of the movement and transformation of society.

In order to obtain a general picture of the phenomenon of knowledge control and protection I have done some empirical studies, which consist of interviews with a number of companies in the information technology business. I have also talked to representatives from the union and employer's associations.⁵ I will throughout the essay present the material that I have found. In some cases I have been asked not to reveal company-specific information or company names, but this fact has no significance for my conclusions, since my object is to analyse the business as a whole. In some cases it has been hard to get hold of information, but I think that the material that I have collected is enough to make some sort of conclusion, even though it may not be statistically correct.

4 The New Society

In order to understand what this essay really is about the reader must be aware of the background. This means that the reader has to know something about the big changes in our society and why society now looks like it does. It is not my intention to make a journey through history, only to point out some major facts.

According to many writers, politicians and scientists the industrial world has entered into a new society.⁶ The label of this new society varies depending on what tendencies in the development are emphasised. It has been labelled⁷ the post-industrial society, neo-industrial society, information society, and knowledge society and service society. But it is not necessary in this essay to choose a single name for this phenomenon. The only thing that we must know is that we have left the traditional industrial capitalistic order and entered a new society. It is more interesting to explore the contents of this so-called new society.

What are the characteristics of this new order? The industrial sector has decreased in favour of the service sector; more people are today employed in the service business than 30 years ago. The development and

⁵ Mediafacket and ALMEGA.

⁶ Fahlbeck, JT nr 4, 97/98, p. 1016-1033 among others.

⁷ Ekstedt, Lundin, Söderholm, Wirdeus, p. 1.

importance of knowledge has increased rapidly, while schools, universities and companies are more aware of the importance of knowledge and the strategic use of it. People stay longer in school and education has become more sophisticated to cope with the constant and quick change of society.

New abilities are required from both companies and individuals. Knowledge, services, and information technology are developing and spreading fast, especially through the Internet. The old hierarchic organisations are being replaced by flexible, informal organisations, which can adjust themselves to reality more effectively than before.⁸ Old routines and rules are being transformed into new ones. Traditions and institutions are becoming obsolete in the same way as they did when society transformed from an agrarian to an industrial one. This change or transformation has by many been regarded as a revolution.

The concept of work has changed in a considerable way too.⁹ The amount of traditional industrial workers has decreased and machines have replaced many of them, but industrial production has not declined, it has increased. Nowadays machines and robots do many of the tasks formerly performed by manpower, but the number of people employed in the industrial sectors has not declined. Workers have merely changed working areas, and are now working with service functions.¹⁰ Employees are nowadays well educated and can understand and communicate with the rest of society. The worker is independent in relation to his employer and to the rest of society. He can often determine the course of his own life successfully and is not in need of a patriarch to make decisions for him. This is due to an increased amount of knowledge.¹¹

The production of goods is still going to be important and substantial. But it is going to be more complex, since products are becoming more sophisticated, and are often supplemented by advanced services. The services are often equally important as the product itself, since without the services the product wouldn't work. Production is more flexible and temporary organisations will start to grow. A lot of work is done in projects instead of in a large factory by the assembly line. Many companies are also adjusting to the constantly changing environment by out-sourcing many of their manufacturing units to other entities. Previously Ericsson manufactured all the technical parts themselves, but now they have out-sourced many of the manufacturing functions to subcontractors. Production is not as important as it was before; today it is more important to control knowledge and the intellectual property rights connected to the production. The control over knowledge is apparent even in traditional manufacturing industries and not just in the emerging information technology business.

Above I have pointed out some tendencies of this new society of which we are a part. There may be other tendencies that are equally important to those mentioned, but it is not the tendencies themselves that are important — it is the ability to control them, which leads to success. One way of doing this is to use the knowledge itself. Knowledge has become by far the most important asset in our society, for without it you lose the ability to compete. You have to create an environment where knowledge can grow and develop. This fact is extremely evident in companies that deal with information technology. Our ideas about law also have to be changed in a way that allows us to cope with the problems this new society creates. Some old legal structures may have to be erased and replaced with new ones. We must ask ourselves if the legal order is

⁸ Ekstedt, Lundin, Söderholm, Wirdenius, p. 3.

⁹ Crandall & Wallace, p. 160.

¹⁰ Ekstedt, Lundin, Söderholm, Wirdenius, p. 3.

¹¹ Fahlbeck, JT nr 4 97/98, p. 1018-1019.

enough to take care of our new society. These questions are huge and it would be too much for me to answer them in this essay.

4.1 *The Knowledge-based Company*

In this new society new companies have started to evolve. These knowledge-based companies differ quite a bit from ordinary companies, where production is the central element. The structure of a knowledge-based company is different too. There is no homogenous definition of the knowledge-based company, but according to Sveiby and Risling the characteristics are:¹²

- no standardisation
- creative
- strongly dependent on individuals
- complex problem-solving

They produce knowledge and they are highly specialised. The customers are clients and are treated on an individual basis. A difference between ordinary service companies and the knowledge-based company is the complexity of the production. The latter deals with highly complicated problems while the previous deal with simple problem solution. The personnel in a knowledge-based company are highly educated compared to the personnel in the ordinary service company. Highly developed service companies are producing services in an industrial way; the prototype for this kind of production is McDonald's hamburger restaurants, where the personnel don't need the ability to read to be able to serve the customers.¹³ They have a very highly developed organisational skill, i.e. the knowledge and the competence lies in the organisation itself, not in the personnel.

The opposite of the McDonald's restaurant is the consultant firm, where the company is extremely dependent on personnel achievements. Highly trained and skilled consultants help their clients according to the client's desires. You always satisfy the customers' needs, and if you not are able to do so you will be out of the competition.

Information technology companies are knowledge-based. They fit in under the definition made by Sveiby and Risling. To me the consultant firm is the most important to analyse, because it is dependent on individuals, whether it may be many or few.

5 The Concept of Knowledge

In this chapter I will point out some of the difficulties for information technology companies when it comes to the concept of knowledge. Many authors have tried to define the meaning and the scope of the concept of knowledge. It is, however, almost an impossible task, to give a precise and homogenous definition of the concept. The definition depends on the purpose for which knowledge is used and in what context. For me the definition is not very important, although it may have some significance for the understanding of this essay.¹⁴

¹² Sveiby & Risling, p. 13.

¹³ Sveiby & Risling, p. 11.

¹⁴ For further reading see Sandgren (ed.) p. 23-28.

I will hereby attempt, when it comes to the concept of knowledge, to discuss several problems, which can occur in the absence of a clear and precise definition.

There is no legal definition of the concept of knowledge and it does not exist in the legal vocabulary either. The concept of knowledge can be found in the Patents Act and the Act on Protection of Trade Secrets.¹⁵ The Patent Act has invention as its central concept. The Act itself has not defined the concept of invention but it has been defined in case law and by legal writers. The starting point is the function of the Patent law, which is to promote industrial development. In the preparatory-works to the Act on Protection of Trade Secrets the concept of knowledge was discussed¹⁶ but this section was later taken away by the government.¹⁷ This constitutes only sporadic use of the concept and is not an adequate basis for conclusions. Since there is no legal definition, many legal problems can occur when using the concept.

5.1 Lack of Precision

If we are going to use the concept of knowledge in a legal context we definitely need a more precise definition than the ordinary one used in social science. The concept must be very clearly defined in order to be used in matters related to rights of disposition and protection. This could be expressed in commercial contracts or in legislation about intellectual property rights. You can always, as a contracting party, in an agreement with your partners, define what the agreement is about, but it is hard to obtain some sort of factual definition and it is always up for interpretation by the other contracting party.

If you, for instance, are going to reward an employee for the work he or she has done, you are also in need of a clearly defined concept. What type of knowledge is going to be rewarded and who is to receive the rewards? Can knowledge be derived from one single person or is the knowledge derived from many persons? It is very hard to know where knowledge comes from; very often there are many people working on the same project and the management really doesn't know who is making what. These questions can be regulated by employment law or in legislation about intellectual properties. This becomes especially important when you are dealing with people that are not employed, such as different subcontractors.

In another scenario the company wants to borrow money from a bank. Can the company put knowledge up as collateral? Normally the bank officer will not handle your application or at least refuse it, unless that you can show that your knowledge has been patented or in some other way materialised. Patents can, according to Swedish law, stand as collateral.¹⁸ But to obtain a patent you need a clear and precise definition of the knowledge, which is stated in the patent application. But what do you do when you don't have your patent and you know that your only asset is your mind and the knowledge? The unclear definition of the concept of knowledge makes it difficult or rather impossible to use knowledge as collateral.

¹⁵ SOU 1983:52.

¹⁶ SOU 1983:52 s. 287.

¹⁷ Prop. 1987/88:55 about trade secrets, p. 12.

¹⁸ The Patents Act, Chapter 12.

5.2 Economic Value

Another problem with the concept of knowledge is the evaluation of the phenomenon. The value often lies in the originality and the grade of innovation, while the older the knowledge becomes the less value it has. Knowledge is closely connected to time and novelty, and this fact makes the handling of knowledge-related issues risky. Knowledge must be exploited before someone else exploits it, and it must be exploited before it gets old. This is very important especially in the innovation business, where the companies put a lot of resources into R & D to attain new knowledge. If they not are able to protect their findings and results in some way, the consequences might be disastrous.

An economic value is also important when the knowledge is the object of dispositions. For example, if we are going to sell a knowledge-based company, how do we value the assets in this company? The knowledge is connected with the personnel and not a part of the balance sheet. It is difficult to get a fair view over the balance sheet and the real financial situation. Can we make some sort of agreement where the personnel are a part of the deal? And if we are going to sell an intellectual property right, what is the content of this right? What is the value of a license agreement?

According to the Act on Protection of Trade Secrets a person can be liable for damages in the case of industrial espionage.¹⁹ What is going to be the amount of the damages? Here again we face the problem of economic value, see below section 6.3.2.3. It is hard, in fact virtually impossible to determine the damages for the company in the case of industrial espionage. The same applies if an agreement is breached by any of the contracting parties; what is the amount of the damages incurred?

Problems also arise when trying to protect the creditors in a stock company whose main assets are unspecified and unclear.²⁰ Here legislation needs to be monitored so that it satisfies the needs of knowledge-based companies.²¹

5.3 Connect the Knowledge to the Company

The fact that knowledge is bound to the individual who carries it is problematic from a legal and economic point of view. In the case that knowledge is not protected with patent or other intellectual property rights, it is very hard to control it. This can be achieved through certain agreements, but it is not an easy task. You really have to know what you are doing when dealing with this kind of question and must be aware of the rules in law, case law and collective agreements that set out the boundaries for what you are allowed to do. The management must also be aware of the consequences of the instruments used.

This is also a conflict of interests. Conflict lies in the employer's need for protection and to cope with the competition and the employee's wishes to move freely on the job market. This fact is clearly evident in information technology business. It is very bad for a company in this business if key-persons leave the

¹⁹ The Act on Protection of Trade Secrets, 5-10 §§.

²⁰ See for instance the rules about capital protection, the Swedish Companies Act, SFS 1975:1385, chapter 13 § 2 for instance.

²¹ Sandgren (ed.), p. 49.

company and take the “assets” to a competitor. The employer can take several measures to prevent the movement of key-persons.

Controlling and protection possibilities:

- By law
- Through agreements with restrictive covenants, secrecy agreements and other contractual conditions.
- Prolonged periods of notice
- Incentives, rewards and developing opportunities

I will discuss these questions more thoroughly below in chapter 6 and 7.

What consequences can a substantial loss of personnel have? First of all, if one or a few key individuals leave the company it is more likely that others will follow. One defection will often lead to more defections. The personnel that follow might feel secure when moving along with the working friends. Secondly customers prefer to work with the consultant that they always worked with. This means that the company will also lose the clients. Thirdly, the departure of key persons means that the company will lose a lot of competence in the working field, making the company less likely to fulfil its projects. Fourthly, the company will lose goodwill when key personnel defect. Key consultants often have a good relation with clients and are familiar with the client’s systems. Naturally it will be hard to replace these people. A defection might start to circulate rumours about the company concerning why the personnel left. This makes recruitment even harder, since many people like to work with professional and highly skilled personnel. Fifthly, the culture of the company can change from being very creative and high-tech to the opposite; there are no new projects, ongoing projects remain very simple and nothing really happens. These five consequences also have great economic impact on the company.²²

I put forth this question in my empirical studies, which is very crucial for the companies in the information technology business. The question was: “is the company prepared in the event that a complete team leaves it and how do they face the consequences?” The initial answer was that this had in fact never happened, but the question remained compelling. One company said that it is possible to have a back-up team, but this costs money and the project will be delayed. In many cases, if only one or two people leave a company, it is up to the client to decide if he still wants the company to handle the mission. The business is still regarded as relative small and it would mean bad-will for the company to fight with employees that want to leave the company; meaning there would be little gain. One company told me that 3 of their most highly skilled consultants left the company for a smaller competitor. The smaller competitor couldn’t fulfil its promises to the consultants and they returned after less than 6 months to their former employer, with whom they still had a good relationship. Even if employees want to leave company and take knowledge with them, it is important to maintain good relations, since they might come back in the future. An employee who is retained against his will will hardly be a good consultant. The best thing to do is to create a good solution for all parties, according to the companies that I have spoken to.

5.3.1 Networks

Another way to protect or make the most of the knowledge in a company is to start up networks between customers, suppliers and other entities. The network participants are all in need of the same knowledge and

²² Lindmark (ed.), p. 120-121.

together can develop this knowledge to make the most of it. The protection here is that all parties are in need of the same knowledge and also keeping this knowledge a secret. There is a mutual need not to disclose or reveal anything to outside parties or entities.

Networks are also built in tacit ways between employees' friends, relatives and other persons. It is important to maintain control of this process, since the network is an excellent source for developing knowledge and is a good tool to use when spreading it.

Networks have a weakness in that it is hard to point out one entity responsible for the networks' actions. Who is legally responsible? The problem can be solved with a range of agreements, but there is a risk that legal rules will be set aside when setting up these agreements.

5.4 Organisation

A knowledge-based company's organisation is characteristic of adhocracy, i.e. a temporary set-up organisation which is very informal and project oriented. There are very few levels in the organisation. From a legal perspective this may cause some problems, since the law requires clearly defined objects to be responsible, especially when it comes to the owners or the management of the company. This problem shall not be exaggerated, however as the Swedish Companies Act provides rules and solutions for this type of situation.²³

Another problem with the loose organisation structure is the employer's need for control over employees. For whom is the employee working? Is he working on new contacts outside the company structure? Is he going to use them for his own purposes? Are the employees allowed to participate in new start-ups? Of course the employer cannot act like a big brother and monitor everything the employees do, but he is certainly in need of some control.

5.5 The Power in Knowledge-based Companies

The employees in a knowledge-based firm have a stronger position than in ordinary and more traditional companies. This is because they have control over the most important assets in the company — the knowledge. The base of power that investors have thus increases correspondingly. The consequence for the employed is that strong unions and a highly developed employment protection are not necessary, at least to the same extent as before. Employment law has become individualised. Their power is expressed through their knowledge.

A problem with this kind of power is that it is informal. The formal power is still with the investors and capital owners, and they can use their power at the annual general meeting. But the stockholders in a knowledge-based company must listen to the employees, since they are the key to profit and increased value of the stock. The employees should try to get their knowledge-based power transformed to formal power, i.e. they should become partners and own stock that can be transformed into money. More further down about incentive programs in chapter 7.

²³ See for example chapter 8 and 9 the Swedish Companies Act.

5.6 Conclusion

We can clearly see that the concept of knowledge causes several problems, all of which end up in almost the same place. This place is the need of a competitive advantage; the company must have the bricks to build a successful business, and one of those bricks is the concept of knowledge and the control there of. Perhaps it is impossible to take care of all the problems described above, but the management must be aware of their consequences, both legal and economic.

6 Control and Protection of Knowledge

In this chapter I will discuss the potential legal ways for a company to control and protect knowledge. Control and protection can be achieved by law or through agreements. I will start with the protection allowed by agreements since an agreement is the most important instrument to achieve the purpose and since all employees have an employment contract or some other form of agreement with the employer. The focus will be on the private sector and the information technology business; I will not describe or analyse the situation in public sectors such as health institutions, but the problem has significance there too.

The interest of protection is, as I have stated above in chapter 5, very difficult to define clearly. It is therefore difficult to exactly say what the companies need control and protection of. Some knowledge is materialised in patents or other intellectual property rights and thus protected, but what about knowledge that is not materialised such as know-how or other personal skills? These intangible assets can be as equally important as intellectual property rights, and if they are not effectively protected or taken care of, the company can suffer considerable damage. The focus will mainly be on these intangible assets.

What we have here is a conflict of interest between three equally important parties. They all are dependent on each other. First, we have the interest of the society — the interest in efficient competition without restraints. Secondly, we have the company's interest in protection of knowledge, which consists not only of exclusive rights to products or production methods, but also to the collected knowledge of the business as a whole including connections, marketing and customer relations. This latter interest is just as important as exclusive rights to materialised assets or intellectual property rights. Thirdly we have the interests of the employees. Since it is the employees that carry the knowledge and know-how, they have an interest to make the most of it. They want to be able to move freely, start their own businesses, and change employers. In short, the employees want to develop their skills²⁴ and grow as people, which may only be achieved if the move.

It requires a very sensitive touch for a company to build structures around the conflicts of interests. The last thing we want to do, from a company perspective, is step on anyone's toes, but at the same time, we want to make our business successful. In the following, I will discuss the legal opportunities of both protection during and after the employment. First of all though I will discuss the general obligations of the employee.²⁵ I will in the following concentrate my efforts to the relationship between employer and employee. I am aware of that the control and protection of knowledge has significance in the relationship between other principals and independent contractors, but I believe that solutions to the problem can apply for them too; I will not therefore

²⁴ For a further discussion about skills see Sandgren (ed.), p. 222.

²⁵ Fahlbeck also makes this division, p. 96.

treat them specially. Basically, the foundation of this relationship is the agreement and different contractual conditions can be used as tools to reach the objectives.

6.1 Obligations of the Employee

Most regulations about the employee's obligations are found in employment law, but competition and secrecy are not well regulated. The documents that regulate this relationship are general principles of law and implicit regulations in the employment contract. Case law from Arbetsdomstolen (AD) has helped in the development of employment law and the relationship between employer and employee.²⁶ An employee has certain obligations, which come from the employment contract and the special relation between employer and employee. First of all, the employee has an obligation to work, but he or she also has obligations that are derived from collective agreements. These other obligations may be clear or unclear. The starting point in Sweden is that law does not regulate the relationship between employer and employee. Questions about obligation to work, management of work, obligation to obey, the right to working results, and also the questions of secrecy and non-competition have been solved by case law. Still many questions that remain unsolved in this area.²⁷

6.2 Control and Protection during the Employment

6.2.1 The Duty to be Loyal²⁸

The employee has an obligation to put the employer's interest first.²⁹ This obligation is not expressed in the employment contract, but has been regarded as a part of the contract through case law.³⁰ The duty to be loyal is not uniform in any way; it consists of several components. The employee shall put forth an adequate effort in the interest of the employer and pursue the employer's interests. The employee has to tell the employer about circumstances that might be useful to him. This could, for example involve information about customer relations. The employee also has an obligation to avoid conflicts with the employer,³¹ is not allowed to start a competing business, and, most importantly, cannot disclose valuable information.³² The loyalty principle can be regarded as one of the foundations of the employment law system since in many cases the employer's interest rests in the hands of his employees.³³ This is apparent in knowledge-based companies.

The duty to be loyal can be regarded as a general principle of law that is included implicitly in employment contracts or collective agreements. People with key positions in a company have to be loyal to a greater extent compared to ordinary employees.³⁴ This is the case in many information technology companies, where

²⁶ Fahlbeck, p. 94.

²⁷ Fahlbeck, p. 94.

²⁸ Schmidt, p. 257 and Fahlbeck, p. 94.

²⁹ Some cases that establishes the scope of the duty, AD 1982 no 9, AD 1986 no 95 and AD 1988 no 162.

³⁰ AD 1982 no 110.

³¹ Schmidt, p. 257.

³² Despite this, the employee has a right to criticise the employer, AD 1981 no 124, 1982 no 110, no 159, 1986 no 95, 1987 no 5, no 22, no 67, 1988 no 67 and no 162.

³³ Svensäter, p. 112.

³⁴ Sandgren (ed.), p. 229 and Fahlbeck, p. 101.

personnel work in projects, with only a few people involved. This circumstance makes the projects sensitive towards personnel movement. The key people in the project must put the employer's interest first and focus completely on the project.

A problem with the duty to be loyal is the extent of time that it applies. Shall the employee remain loyal after the termination of the employment contract? Of course the employee no longer has an obligation to go to work, but is he allowed to disclose information that he received with his former employer, thereby causing him harm? The main principle is that an employee has full right to use the knowledge he has received with former employers without any restrictions. This is, of course, if nothing else is agreed upon.³⁵

The relation between the employer and the employee is based on an agreement. Previously the employer has been regarded as the stronger of the contracting parties, but when it comes to the knowledge-based company in information technology it might be the other way around. Here it is the employer that is dependent on the employee, which means that the employee may have a stronger position or at least one of equality with the employer, especially if he or she is a key person with special qualities. This can be regarded as a significant change to traditional employment law. Because of this new circumstance we can start to talk about the obligations of the employer. In order to keep key people the employer must create a good working environment and provide reasonable employment conditions.

A breach of the duty to be loyal can result in various sanctions, such as warnings, notices of dismissal or disciplinary actions.

6.2.2 Professional Secrecy

The employees in the private sector do not work under rules regarding secrecy demands, but they do have the duty to be loyal and there is no doubt that an obligation not to disclose any information is included. Since the freedom of contracts applies between the parties it is possible to enclose comprehensive secrecy clauses in the employment contract. The extent and the scope of professional secrecy have not been up for discussion in AD, so we really don't know what is included. But according to some legal writers, the scope of the secrecy is relatively large, since this is a contract and one contracting party shall not in any way harm the other contracting party.³⁶ Rules about secrecy can also be found in collective agreements.

Since the relationship between employer and employee is based on an agreement, the agreement can be adjusted if it is found to be unfair or unreasonable according to The Contracts Act 36 §.

6.2.3 Obligation not to Compete

Included in the duty to be loyal is the obligation for the employee not to harm the employer in any way. The central element of this obligation is not to compete with the employer and thereby cause harm. All kinds of agreements can be used by the employer to limit the employee's ability to compete, even in cases where the

³⁵ There are a number of cases that deals with the duty to be loyal and competition, AD 1977 no 118, AD 1982 no 42 and AD 1983 no 93.

³⁶ Fahlbeck, p. 97.

employee only uses his or her personal skills, knowledge and experience.³⁷ The agreement can be adjusted in event it is found to be unfair or unreasonable, The Contracts Act 36 §.

6.3 Control and Protection after the Termination of the Employment

When employment is terminated the obligations of the parties are terminated. The employee's duty to be loyal ceases to exist. In other words the employee is free to speak about his previous work, and to involve himself in competitive business ventures. If the employer thinks that he is in need of further protection he has to protect himself through agreement with the employee. I will in this section discuss a few possible types of agreements and contractual conditions.

6.3.1 Control and Protection by Agreement

There are a number of contractual conditions that can be used by a company to protect knowledge. The company can use restrictive covenants, secrecy agreements or other contractual conditions.

6.3.1.1 Restrictive Covenants

A restrictive covenant is understood as a condition stating that the employee may not conduct any business competing with that of the previous employer's for a certain period of time. The presence of a restrictive covenant in an employment contract means that the employee is forbidden to conduct any competing business with the employer. The conditions for this prohibition can vary from case to case. Normally there will be sanctions, which either can be damages or fines. Very often the covenant includes a clause which prohibits the disclosure or use of trade secrets. The restrictive covenant has three parts.³⁸

1. Rules about non-competition
2. Rules about secrecy
3. Rules about sanctions

In the case of unfairness or unreasonable conditions the first part is judged according to 38 § The Contracts Act while the latter two parts are judged according to 36 § The Contracts Act.

The purpose of restrictive covenants can differ. First of all the clause can protect the employer from competition in the market. It will prohibit the employee from conducting business in certain geographic areas or with special customers. This prohibition does not include the use of knowledge that the employee has acquired during his employment, but it will to some extent include connections and personal goodwill. The restrictive covenant can also protect the employer from harmful use of knowledge by employees elsewhere in the market. This applies particularly when knowledge is a trade secret. Restrictive covenants, whose only

³⁷ Fahlbeck, p. 102.

³⁸ Fahlbeck, p. 105.

purpose is to retain employees with special knowledge, have not been accepted by AD.³⁹ There must be a genuine interest in protecting trade secrets or similar secrets.⁴⁰

6.3.1.2 The 1969 Agreement regarding Restrictive Covenants

This agreement between SAF and SIF, SALF and CF regulates the use of restrictive covenants in the private service sector. It states courses of action and possible difficulties. The purpose of the agreement is to afford protection to those companies that develop or acquire specific knowledge. It is important that the employees remain loyal to their employer, since the company invests a lot of money and work for the right to use this knowledge, even if the employment has ended. And if a competitor gets a hold of it, that could signal the end of the business.

The agreement states a restriction of the scope. Restrictive covenants shall only be used if the employer is dependent on self-governed product- or method-development and through research, acquires production-secrets or other company specific knowledge, the disclosure of which would cause obvious disadvantage and harm. The same goes for companies who acquire these kinds of secrets through agreements. Restrictive covenants may only be used in the employee's employment contract if the employee during employment obtains production secrets or comparable knowledge and through education or experience has the opportunity to use it.⁴¹ Restrictive covenants are designed to protect only company-related material such as production secrets or knowledge comparable to these secrets. Personal skills and connections that the employee has acquired are not included in the agreement. These conditions are a little bit unclear and it is difficult to assess what exactly is included. It could be difficult to draw a line between what are company specific and what is not.

When deciding whether a restrictive covenant shall be used or not the parties have to weigh interests, the employer's interest in protection against the employee's interest of free use of his labour. It also states that the use of restrictive covenants shall be decided on a case-to-case basis.⁴²

The meaning of a restrictive covenant is that the employee has promised not to undertake any business, which competes with the former employer after the employment has come to an end. If the employee breaks this promise, he will be liable for damages. The time for liability should not exceed the lifetime of the knowledge, normally this time is not longer than 24 months.⁴³ From my viewpoint a reasonable timespan for protection in the information technology business would be no longer than a year, since technical development is fast in this area. Damages shall be set in proportion to the pay of the employed, and should not exceed six months' pay.⁴⁴ In the agreement a reference is made to an enclosed restrictive covenant, which is supposed to be used by the parties.⁴⁵

³⁹ AD 1991 no 38.

⁴⁰ Sandgren (ed.), p. 240.

⁴¹ Section 1 of the agreement.

⁴² Section 2 of the agreement.

⁴³ Section 3 of the agreement.

⁴⁴ Section 4 of the agreement.

⁴⁵ Section 5 of the agreement.

There are a few problems with the use of restrictive covenants and the use of the 1969 agreement. First of all it is not at all certain that a given employee is a member of the unions mentioned in the agreement; what parts apply to them? This is common especially among smaller businesses. Secondly, restrictive covenants represent a threat to the employee, which means that the employer will likely have to pay the employee more than he would without the restrictive covenant. Thirdly, it is difficult to assess what is included in the clause, what type of knowledge? It is also difficult to know what the employee does during his free time. Another problem is the age of the 1969 agreement. Do companies really apply a document that is 30 years old? In my view this is a considerable problem in the information technology business, where knowledge and business must constantly grow in order to compete, while the management only thinks of technical development and forgetting personnel development and the development of the knowledge within the company. The agreement is written for the production industry in the late sixties and it could be hard to apply it to the service sector, according to Lars Sydolf.⁴⁶ This is so especially because structures and forms of organisation also change rapidly.

6.3.1.3 Validity of Restrictive Covenants

The general rule regarding employment contracts is that the principle of freedom of contracts applies. Despite this freedom there are some exceptions. This is the case when a restrictive covenant in an unreasonable or unfair manner limits the employee's freedom.⁴⁷

The discussion about what is reasonable or unreasonable invokes the conflict of interests described above: the employer's right to knowledge versus the employee's. Bruun has described the test of reasonability in two steps.⁴⁸ First of all, one must ask whether the employer is in need of real and acceptable competition limits for the employees, and, if so, what the scope of this limit should be. In the event that there is no need, then the restrictive covenant is unfair and invalid. Step number two is, when we have decided that there is a need, to measure the respective interests involved. This must be done within the context of the general picture. The preparatory-works to The Contracts Act 38 § say when that the 1969 agreement about restrictive covenants shall be the starting point when prioritising the interests involved.⁴⁹

6.3.1.4 Restrictive Covenants in Case Law

There have been a number of cases in AD related to restrictive covenants. I am not going to describe them all. I will just try to describe the general tendencies in the case law. First of all we can say that the court has a restrictive attitude towards restrictive covenants. This tendency comes from the state, which has a restrained attitude with respect to limits in the competition. An employer shall not be able to prevent an employee from free disposal of the knowledge that he or she has acquired during the employment. Exceptions are made when the knowledge is related to trade secrets. Another exception is when the employee has promised to stay with the company as a "payment" to the employer that paid the education for the employee. Normally AD approved with restrictive covenants as long as the employee gets a payment during the time the restrictive

⁴⁶ <http://www.zedir.se/alpha/anstallning/konkurrensklausuler.html>. 1999-12-07.

⁴⁷ The Contracts Act 38 §.

⁴⁸ Bruun, p. 75, NIR 1988.

⁴⁹ This was done in AD 1977 no 167 and 1984 no 20.

covenant applies. The employer shall compensate the employee for the limited freedom that a restrictive covenant means.

6.3.1.5 Secrecy Agreements

A secrecy clause can be incorporated as a part of restrictive covenants but it can also stand on its own. A secrecy clause is understood as a condition stating that the employee cannot disclose information he has obtained during employment after the termination thereof.⁵⁰ Not much has been written about secrecy clauses and it seems that they are not in wide practical use.⁵¹ Even though the use of secrecy clauses is not very widespread, they are accepted by the legal order since the freedom of contract applies. Since a secrecy clause places smaller restrictions on an employee than a restrictive covenant does, the secrecy clause must be viewed as an acceptable part of the employment contracts.⁵² Despite this freedom of contracts the company should be restrictive in its use of secrecy clauses for three reasons.⁵³ First of all the need is limited outside the area of trade secrets, see below 6.3.2.3. Secondly, the use of secrecy clauses leads to too much secrecy in unnecessary areas. Thirdly, the secrecy clauses make it harder for the employee to criticise the employer. In other words the secrecy clause has to be specified and take effect under certain circumstances.

6.3.1.6 Practical Use of Restrictive Covenants and other Contractual Conditions

It is hard to observe the use of restrictive covenants and other contractual conditions in real life, since they are not public information and the companies are not very keen on revealing their employment contracts. And there is no real investigation that treats the issue of restrictive covenants or other contractual conditions explicitly.⁵⁴ According to Fahlbeck, the use of restrictive covenants is decreasing, but his statement is a few years old and was written before the information technology boom. Magnus Drougge at Mediafacket, who is of the opposite opinion, believes that the use of restrictive covenants, secrecy agreements and other unfair employment conditions is increasing in the information technology business and that the use is often not thought through very carefully. The companies that I have talked to regard employee defection and competition as a very serious matter. But even though it is considered as a threat, restrictive covenants have not been reinforced to a great extent. They exist but are seldom reinforced against a former employee. The companies seldom see a gain in reinforcing them. First of all, it takes time and effort to process and, secondly, it might produce bad-will towards the company going after one single employee. Restrictive covenants and secrecy agreements are used, but they are only applied in a “worst-case-scenario”, when there is an actual need. None of the companies or organisation I have talked to have gone to court to reinforce any contractual conditions.

According to Mediafacket, the conditions in the employment contracts are very often unfair and unreasonable, especially in the information technology business among smaller companies. These companies tend to see things more in a short-term perspective than the larger companies, and they are not aware of the problems that might occur. They often try to exploit the employees as much as they possible can. When it comes to

⁵⁰ Fahlbeck, p. 124.

⁵¹ SOU 1983:52, p. 179.

⁵² Fahlbeck, p. 126.

⁵³ Lag & Avtal, nr 7, 1999, p. 8.

⁵⁴ Fahlbeck, p. 131.

restrictive covenants they often exceeds the allowable limits. For example, the time of non-competition is very long, if it is compared to the employees work. The scope of the contractual conditions often goes far beyond the needs of the company. The damage amounts are often set at unreasonable levels. Sometimes the employer doesn't pay any wages for the time of the restrictive covenant. These problems are especially apparent in companies, which not are members of an employer's association such as SAF.

The employers are also aware of that there is a shortage of competent personnel in this special field.⁵⁵ The shortages of labour means that the employers might test the limits of what is allowed and impose unfair conditions on the employees. The employer does this to insure that he has the employees that he needs. The use of restrictive covenants may have proved to be ineffective too. The employee knows what his assets are and will most likely not get rid of them that easily. The employee will probably only accept a restrictive covenant or other imposing contractual conditions if a considerable remuneration follows.

During my interviews and empirical studies I have found other conditions that have effects similar to those of restrictive covenants. Some companies apply prolonged terms of notice for key persons in order to make them finish a project they started. The length of this term can vary depending on their function in the project, but normally it is from 3 to 6 months. In another condition found a consultant is not allowed to bring commissions to competitors after the termination of the employment. This type of condition is, despite the interest of keeping the knowledge within the company, very hard to reinforce, since the customers or clients decide what consultant to use; if the consultant leaves the client will probably follow him. This is often a matter of negotiation since the company really does not gain anything by fighting over the defection of one a few consultants.

6.3.1.7 Strategic Use of Agreements to Control and Protect Knowledge

Above I have described the formal legal ways of controlling and protecting knowledge in the company through agreements. I have also presented the practical use of different contractual conditions. The formal law is important, but more important is the strategic use of these legal tools and their likely consequences. All of the tools are of importance but some can only be used effectively during the period of the employment and others only after the termination of the employment contract. If we look, from a law management perspective, upon the relationship between employer and employee, the most important tool is the employment contract, since freedom of contract applies between the contracting parties and it is possible to include all kinds of conditions. It can be used for a number of purposes, both as an incentive and as a "threat". The company shall use the employment contract to make the employees behave in a certain way. During the time the employment contract is in effect, we know from the sections above (see 6.1) that the employee has a number of obligations. These employee obligations mean that the company is at least protected to some extent because the employer has the opportunity to control the employees and their knowledge. One could say that the employees' obligations that come from their contracts represent the first steps towards achieving the goals of control and to protection. The duty to be loyal is the foundation of the relationship between employer and employee. The employer can use this duty to make the employee refrain from competition or the disclosure of trade secrets since there is a sanction for breaching this duty. This sanction can consist of liability claims but also "bad will" for the employee, which could cause the most damage.

⁵⁵ Dagens IT, October 1999.

It is more difficult for the company to deal with the situation that arises after the termination of employment. Normally the employee would be allowed to do whatever he or she desires, but as we have seen above in chapter 6 the employer can put limitations on this freedom. And of course this limitation has its consequences. First of all the company must most certainly pay the employees a higher salary or give other types of rewards if a restrictive covenant or another contractual condition limits them; basically the employer pays the employee to accept the secrecy policy of the company. One could ask the theoretical question: how much would the company pay to “own” the employee, i.e. the employee cannot, during the rest of his lifetime work for someone else. Would AD accept an agreement like this? Secondly, the signals that these kinds of conditions send to the outside world must be analysed; i.e. the conditions must not be seen as unfair or unreasonable. Too much publicity around unfair and unreasonable employment conditions will create difficulties for the company as it tries to retain and recruit new competent personnel. Finding the best contractual solutions is really a delicate balance act. The company can take a tough approach with their employees, but must then run the risk of getting bad publicity in media and among unions. Even the employee can have difficulties finding a new job if he is stubborn and fights over a contractual condition. Therefore the company must form the terms according to the needs of the company and not exceed these needs. One circumstance that must be revised is the amount of time that the restrictive covenant applies and in what field. I have above in section 6.3.1.2 discussed the guidelines for restrictive covenants. These guidelines shall, however, be used with great caution since they are old and built to serve the industrial sector and not the information technology business, see above 6.3.1.2. But still, the company can always stretch these legal limits, limits which are found in the contractual conditions set up by case law and preparatory works. Then it becomes more than a legal matter; it becomes a moral question. How far are the company and management willing to go to impose contractual conditions?

The company must also beware the consequences of reinforcing a restrictive covenant or other contractual condition before a court. There is always the chance that information will come out, that the company wants to keep private. And, of course, a court procedure costs money and effort and you never really know what the outcome of the proceedings will be. We also know that AD has a very limiting attitude to restrictive covenants and other contractual conditions in employment contracts. It might be better to settle outside of the courtroom than going through all the proceedings.

If an employee does not follow the conditions in the employment contract, sanctions such as damages could be enforced. This might be an effective sanction but perhaps not the most efficient one. The company always has the opportunity to tell the colleagues about this troublemaker and he will probably have problems finding a new workplace.

In my view restrictive covenant and other contractual conditions should only be used when there is a real and factual need, and, when used, they should be completed with other instruments such as financial incentives. They can not be used for all the employees, only for key persons with special qualities and competencies. And reinforcement shall be seen as a “worst case scenario” since there is no gain in fighting in court over this type of condition. I will discuss other instruments that can be used to achieve the objects in chapter 7.

The employment contract can also be used for the employee to receive intellectual property rights or parts thereof. This could be a very good incentive for the employee to stay with the company and at the same time it could be regarded as an antipole to restrictive covenants. This is very important when the employment contract is used as a strategic tool to find a good balance between the carrot and the stick.

6.3.2 Control and Protection by Law

Control and protection by law is achievable with ordinary intellectual property rights such as patents, trademarks, patterns and copyrights. These rules are important for this essay but I am not going to present them in detail since I concentrate my efforts on the relationship between employer and employee. I know that these rules have significance and I will present them where I think it is appropriate. I make this limitation because the focus in this essay is on control and protection of knowledge that is not possible to materialise, such as know-how and personnel skills. I will however discuss the Act on Right to Employee's Inventions, since this Act is essential for the relationship between the employer and employee. However, the Act mainly up for discussion in this section is the Act on Protection of Trade Secrets.

6.3.2.1 The Act on the Right to Employee's Inventions (AUL)⁵⁶

This Act is applicable to all inventions that come from employees in private or public services, AUL 1 §. The invention must be possible to obtain patent upon. The parties could diverge from the Act by agreements.

In the event that an employee comes up with a good invention, which is possible to protect by a patent, the colliding interests comes into focus again. The inventor's exclusive right to his invention comes into conflict with his duty to be loyal towards his employer as an employee, and the principle that his working results will be the employers.

The Act on the Right to Employee's Inventions has in one way solved this conflict. The starting-point is that the inventor has the right to his invention, AUL 2 §. But under certain circumstances the employer has a right to dispose over the invention to a certain extent, AUL 3 §. First of all the main task of the employer shall be research and development. Secondly the invention shall have come up during this work. And thirdly, if the invention falls inside the employer's sphere of activity, the employer has a full right to get the invention transferred to him or the company, AUL 3 § section 1. Another scenario is when the employee has made the invention in his duty and it is included in the sphere of activity, but not included in the tasks of the employee, then the employer only has a right to a single license, AUL 3 § section 2. If the employee has come up with the invention outside the line of work but it is still included in the sphere of activity, the employer is entitled to an option, AUL 3 § section 3.⁵⁷ In the event that the employer decides to acquire the invention the employee has a right to remuneration, AUL 6 §.⁵⁸

If it is not possible to obtain a patent for the invention the full right of disposal normally will fall to the employee.

One question that has not been solved by AUL, preparatory works or case law is the question of the employee's right to dispose over the inventions if the employer has chosen not to use the invention or not obtained a patent. The problem has been discussed in the preparatory works about employees' inventions.⁵⁹ It states that the duty to be loyal shall apply as long as the employment continues and that the employee may not

⁵⁶ SFS 1949:345.

⁵⁷ Koktvegaard, p. 230.

⁵⁸ Koktvegaard, p. 231.

⁵⁹ SOU 1980:42.

dispose over the invention without the employer's consent. This could refer to competition against the employer and a breach of the duty to be loyal.

One could also discuss the opportunities for an employee to sell his rights to an outside party through for example a license agreement.⁶⁰ This kind of action could also be regarded as a breach of the duty to be loyal. The situation refers to the 3 § AUL second and third sections when the employer has a right to acquire the invention and the employee refuses to negotiate or demands too much remuneration.

According to 5 § section 2 AUL the inventor (the employee) has no right to dispose over the invention for four months, section 1, without the employer's approval.

6.3.2.2 Strategic Use of the Act on the Right to Employee's Invention

It might exceed the scope of this essay to discuss AUL, since in an information technology company, which works on a consultant-basis all, intellectual property rights become the customer's property and the performing company has no such right.⁶¹ And in the event that an invention comes out of a project, it is not from research and development so the employer has no direct right to the invention. All this is dependent on what the parties include in their agreements. The regulations in AUL, 2 § section 2 AUL, can be disregarded.

Normally the business in an information technology company is based on the clients; the company does not manage any research and development with the aim to come up with intellectual property rights. This means that 3 § section 1 AUL is not applicable to achieve control or protection. 3 § section 2 and 3 AUL are however interesting to discuss from a strategic point of view. Together these regulations mean that the employer actually can protect the company from loss of inventions that has been made by an employee. But the advantage from a strategic point of view lies in the fact that the employer and employee can disregard from the regulations in the Act and replace them by an agreement. An agreement where the employer and the employee split the exclusive rights to the invention could work as a good incentive for the employee, since he or she then will satisfy the interest of the employer and the own one's as well. The agreement can in this type of situation be used in a very dynamic way; dividing the intellectual properties between different employees and the employer in order to achieve a good and lasting relation between the parties. Intellectual properties can be used to create alliances and good relations with other entities too. This could lead to new start-ups, where both the company and the employee are partners.

6.3.2.3 Act on Protection of Trade Secrets (FHL)⁶²

The background to the Act on Protection of Trade Secrets is a thoroughly weighing of interests.⁶³ Basically there are four different interests that we have to consider. First of all we have the freedom of speech and expression, which tries to limit the protection of secrets. Secondly we have the market economy and the

⁶⁰ Sandgren (ed.), p. 250.

⁶¹ This can always be discussed when the mission is finished, it might be a good idea to solve these kinds of matters by agreements before the company start the mission. That the client's receive all the rights has been the opinion of the companies that I have spoken to.

⁶² Based on Fahlbeck and Iseskog.

⁶³ Fahlbeck, p. 19.

private right to possession, which strives towards the businessman's right to do business undisturbed. Thirdly we have the competition law that take point at keeping fair and just competition. Fourthly we have the employee's interest of using their knowledge. These interests are regulated by the Act on Protection of Trade Secrets, but not all of them in all detail. For the essay number two and four are the most interesting, the other two are also interesting, but not equally important for this essay.

Basically the Act on Protection of Trade Secrets doesn't contain any rules about professional secrecy.⁶⁴ But it takes the starting-point in employment law, where there are rules about secrecy, both in laws,⁶⁵ agreements and general principles of law, see above chapter 6.1. When it comes to the private sector almost all the rules about professional secrecy is made up in agreements.

Trade secrets refer to a broader concept than patents, which means it could be more difficult to assess what is included in the concept. It is included company specific knowledge and know-how and the protection there of. As I have stated above, development and acquiring of knowledge is often connected with high costs and investments. Therefore it is in the companies interest to protect the knowledge they have obtained. This is why we today have an Act on protection of trade secrets.

The term trade secret has a broad base and definition. According the 1 § FHL it shall be:

1. Information that a company or a business man keeps as a secret and
2. The disclosure of this secret should mean harm from a competitive point of view to the company.

This means that the information could deal with anything, which represent the company's business relations or production conditions. This could include information about technical, commercial or administrative conditions. Theoretically there is a difference between information, which is related to personal skill, and information that are related to the business as such. If it is not possible to transfer the information from one person to another it is not classified as information according to the law, and therefore not subjects for protection. In other words the information must be able to transfer to be able to protect. The conclusion is thereby that information that the company wants to be secrets, is a trade secret according to the 1 §. The trade secret can be business-secrets, production- or marketing-methods. The requisite secret is also a broad term, all personnel that deals with the object of secrecy can know about it, without it loses its status of secrecy. The group of people must be able to define. It is not the objective of the regulation to protect criminal actions; this goes without saying.

The second part about harm or injury from a competitive point of view refers to the event that the disclosures of certain information typically cause an injury. To determine the damages in a case of injure we have to make a hypothetical test, which consist of an estimate of how a court would have judged in the case.⁶⁶

According to the 2 § FHL, the regulations only protect against improper actions. An improper action is not when:

⁶⁴ See 7 § section 2 the Act on Protection of Trade Secrets.

⁶⁵ Mostly regarding the public sector, banks and lawyers, which not are the object of this essay.

⁶⁶ Iseskog, p. 15.

1. Someone acquiring, using or disclosing a trade secret. These words are used to define what actions are due to a sanction, 5-7 §§ FHL. What we can say; it is needed some sort of activity from the person that discloses the secret information and,
2. The acquiring, using or disclosing shall be done in order to reveal something. This should be the direct meaning of the action. If there is another motive behind the action, for example economical, it is not regarded as improper action. The information shall be meant to be known to the public and not a competitor and,
3. The revealing shall be about something that can be considered to be a crime or other serious improper behaviour in the company. For the crime sentence in jail is a must to be able to reveal the action. The serious improper behaviour must be assessed in an objective way. It could be about the danger for peoples' lives or health.

According to the 7 § FHL an employee is liable for damages for the harm he or she causes by revealing a trade secret. In the event that the revealing is done after the employment has ended he or she is only liable if there are pronounced reasons, 7 § section 2 FHL. The paragraph regulates the professional secrecy of the employee, which is a natural part of the employment agreement.

The calculation of the damages according to the Act is not dependent on if the person liable is employed or acting as consultant. The 6 § FHL is applicable to everyone that has a business relation with the damaged company and the 8 § FHL states responsibility for everyone. The purpose of the rule is to encourage fair and loyal competition. The calculation of the damages is regulated by 9 § FHL, but as I have stated above it is very hard to make an estimate of the amount of the economical damage, see section 5.2

6.3.2.4 The Relation between the Act on Protection of Trade Secrets and Restrictive Covenants⁶⁷

As I have stated above, section 6.3.2.3, the Act on Protection of Trade Secrets does not contain any regulations about professional secrecy. The professional secrecy is in the private sector based on agreements between the employer and the employee and the Act on Protection of Trade Secrets don't prevent this in anyway. This means that restrictive covenants not present a problem from the Act on Protection of Trade Secrets' point of view.

Another interesting question in the relation between the Act on Protection of Trade Secret and restrictive covenants is the scope of the field that is possible to protect. The Act doesn't protect a trade secret that is classified as personal skills, experience or knowledge of an employee. The Act only protects the special trade secrets, which are company specific. According to the agreement from 1969 regarding restrictive covenants it is not possible to protect personal education, personal working experience and personal competencies of the employee.

As a conclusion we can see that the scope of the Act on Protection of Trade Secrets and the 1969 agreement regarding restrictive covenants is virtually the same. The limitations in the use of restrictive covenants are not due to the Act on Protection of Trade Secrets; it is due to the 1969 agreement and The Contracts Act, 38 §.

⁶⁷ Fahlbeck, p. 130.

6.3.2.5 Strategic Use of the Act on Protection of Trade Secrets

The Act on Protection of Trade Secrets represents the core of the instruments that can be used to protect knowledge, since it is the objective of the society to protect trade secrets. It could be immaterial or material secrets.

If the Act on Protection of Trade Secrets is compared with intellectual property rights from a protection and controlling point of view, we find a very delicate and interesting problem from a strategic perspective. Trade secrets last forever, there are no restriction in time of protection or scope of the protected, see above section 6.3.2.3, while intellectual property rights are public and time limited. The Act on Protection of Trade Secrets does not provide with exclusive rights; the information can be known by several people within the company and still be protected. Intellectual property rights give the owner or owners exclusive rights to dispose over the property. It takes a lot of time to develop and come up with an intellectual property right and the Act on Protection of Trade Secrets provides the company with protection during this time of development. When the development is completed the management has to think of what rules to rely on. They have to weigh the pros and cons with obtaining an intellectual property right and thereby make it public or they can rely on the Act on Protection of Trade Secrets and thereby keep the results within the company for an unlimited period of time. All depends on what type of knowledge or information it is about. Questions the management has to ask itself are what is the estimated lifetime of the knowledge and what is use of the knowledge in the company? The answers can decide on what system to use.

It could be wise also not to keep the information secret and make it public and thereby make sure that no one else can make profit from the knowledge in question. In other words destroy the novelty of the object.

The Act on Protection of Trade Secrets applies to all employees in connection with the secrets. But as we have seen above 6.3.2.3 the Act does not provide the company with any protection possibilities after the termination of the employment besides the regulation in 7 § section 2 FHL. This means that the company must supplement the Act with other instruments such as restrictive covenants or incentives. There is also the alternative to obtain an intellectual property right, i.e. materialise the secrets and make them public in order to achieve protection. This could though mean some additional work in order to comply with the formal requirements of the intellectual property rights.

When I discussed the strategic around restrictive covenants and other conditions in agreements above 6.3.1.7, I discussed the problem of going to court and reinforce certain regulations. We have here basically the same situation. The intellectual property right means absolute protection and publicity while the trade secret only is protected while keeping it secret. And going to court in order to fight over a revealed trade secret represent a great risk to even greater publicity, even though it is possible to have the negotiations behind closed doors. It is also hard to foresee the ruling of the court, since the company itself has few possibilities to effect the decision. Therefore it might be wiser not to go court and avoid the risk of publicity and trouble. In the short perspective it might be a little more costly but in the long run the company will still have its secrets. To solve this problem the management has to make a very careful assessment of the risks and consequences involved.

The Act on Protection of Trade Secrets also contains some efficient forms of sanctions. In a decision from AD⁶⁸ 3 employees were liable for damages up 1.5 million SEK, since they had revealed trade secrets. This shows that the Act on Protection of Trade Secrets can be used to protect the company.⁶⁹ To reveal a trade secret can also be regarded as a criminal action, which could result in a sentence in jail. Hopefully this will refrain the employees to disclose any trade secrets.

6.4 Conclusion

In this chapter I have made a description of the legal possibilities to control and protect knowledge. I have also looked on the strategic use of these legal tools one by one. Therefore it is time to make some conclusions. It is very obvious that one single legal instrument is not enough to achieve the objective to control and protect knowledge. The management has to use a conglomerate of rules and instruments actively to achieve the most. And if the instruments are used the way I have described above I think that the management has succeeded in their objective. The question is however, are these measurements enough? Is the legal order complete enough to satisfy the needs of new knowledge-based companies and the information technology companies? Can the companies in this environment rely on the legal system to control and protect their most important asset? These companies develop and grow at very high speed and it could be hard for the management to control what is happening. Total legal protection of the know-how and knowledge in a company is impossible to achieve, unless we permit slavery, but this is not going to happen. But the companies can anyhow reach a certain level of protection by the legal system. The companies must however stay within certain limits. These limits can be hard for the management in an information technology company to foresee, since the environment is constantly changing and the company must constantly work on staying on the right track to be successful. And there may be not enough time, to thoroughly, go through the legal rules about control and protection of knowledge. The scope of protection might also not be enough, the company can never be sure of that their interest are covered by the legal instrument. But on the other hand the limits can be used in a positive way and make the employees behave in a desired way. Since the environment constantly is changing the limits are changing too and the possibilities to stretch these limits increases. But again this is a question of moral.

This uncertainty forces the management to look upon other instruments that can be used to achieve the same thing but only in a better way. Or at least combine the legal instruments with “softer” ones.

7 Incentive Structures and Reward Systems

It might not be the right way to only deal with legal instruments, such as restrictive covenants, secrecy agreements or other contractual conditions, to protect the company from loss of personnel or to control of knowledge. There are some limits to these instruments. The use of restrictive covenants, secrecy clauses and the Act on Protection of Trade Secrets might be seen as a threat to the employees. Therefore it might be a better idea to present opportunities for the employees instead, in order to make them stay in the company for a longer period of time. These opportunities can be reward systems, incentive structures or other instruments that make the employees happy and satisfied at work. The purpose of these kinds of systems is to encourage

⁶⁸ AD 1998 no 80.

⁶⁹ Lag & Avtal, nr 7, 1999, p. 22-23.

and motivate the employees, retain personnel and recruit new personnel to the company, which is also confirmed by my empirical studies. Some companies use the reward system as a marketing tool in the recruitment process and the emphasis lies both on monetary and non-monetary rewards. To fulfil these purposes the companies, I have talked to, are of the opinion though that in the long run, non-monetary rewards are the most efficient. The system shall also help in the development of the personnel.⁷⁰ Different economical instruments cannot give absolute protection of the knowledge, but they can give the management an instrument to control the employees. Of course legal instruments can be bricks in the reward systems, for example with an opportunity for the employee to obtain a patent jointly with the employer and in form of shares in new start-ups.

The presence of different incentives and rewards has increased dramatically over the last few years. This is due to fierce competition on the market. Internationally, especially in Anglo-American countries different reward systems are very common and they constitute a natural part of the employment contract. This is now happening in Sweden too.

At least the organisations have to compensate the employees for giving their time and effort to the company.⁷¹ Without the employees it wouldn't been possible to achieve the organisation's objectives. The management has to find out what motivates the personnel in order to fulfil the objectives and missions of the organisation. How can we make the employees to do their best, not only one time but also be able to reproduce it? Therefore the management have to design a reward system and reward strategy that lead to the improvement of the organisation's performance. Different rewards and incentives have to be considered; it could be monetary or non-monetary. It is important that the system is fair and equitable.

In this chapter I will focus on the contents of an incentive or reward system. How does a company build a successful reward structure? Which parts are essential to build an effective structure of incentives and rewards?

A reward system is a mixture of instruments and arrangements that make people do their best. It can consist of benefits; performance based pay, equity-related instruments or other forms of rewards. The reward system can also be seen as a system of keeping the knowledge in the company and make the company less dependent on the individuals.

7.1 Reward Strategy

A reward strategy is a plan of action of how an organisation can invest and direct its resources to reinforce certain desired behaviours.⁷²

The reward strategy has to be based on the fact that the personnel are the keys to success. This is why a reward strategy, in a creative way, must fulfil the needs of the employees and the needs of the organisation as well. The strategy must be business driven and respond to the needs of the business to compete, grow and innovate. The overall effectiveness can be improved by an efficient reward system. The strategy will be

⁷⁰ Kempton, p. 51.

⁷¹ Kempton, p. 51.

⁷² Wilson, p. 52.

effected of the reward philosophy of the organisation and will lead to clear reward policies. This will give the company some guidelines and systems, which will be helpful when implementing the mission of the company. It is important to realise that the design of the strategy matters to the effect and the consequences of the program for the company, employees and stockholders. To generally propose a strategy is not possible since the strategy is, in order to be efficient, dependent on the culture of the company and the desired effects. It is not very wise to use a reward strategy from another company. It is very important for the management to explain the reward strategy for the employees, in order for them to understand what policies are used in the reward strategy. A two-way communication is important when creating the reward strategy.

The reward strategy shall take care of a number of problems that are connected with the rewards as such. This means that the management has to make a few decisions, which are clear and precise, because they have to be focused on what to do. When setting up the strategy the company has to think of:⁷³

- The importance attached to pay as a motivating force.
- The use of intrinsic or non-financial rewards in order to make the personnel grow. This can include opportunities to learn and achieve. In short it means the improvement of the working conditions.
- The dividing between rewarding skill or performance.
- The market forces influence on the pay.
- The significance of equity. The system has to be fair in relation to the employee's performance and position.
- The reward system's flexibility.
- Delegation of pay decisions to line management.
- The use of legal tools to make the strategy more efficient and make the law and economics interplay.

In short we can see that the reward strategy must take care of organisational requirements and the needs of the individuals as well. This can be made by extrinsic and intrinsic rewards. In order to do this, the organisation and its members must find out what they are good at doing. How can the organisation improve? How can the organisation use the reward system to reinforce the good? The organisation must also focus on the future and consider what has to be done in order to achieve change and how the reward system can be used to do this. When setting up the reward strategy the management has to be aware of what kind of things motivates the employees. The employees must be satisfied and feel involved. There are a number of theories that analyse what motivates individuals, but it is beyond the scope of this essay to describe them.⁷⁴

The reward strategy is not only a tool for motivating and control personnel. It can also be used to contribute to the achievement of the corporate goals. In short the achievements can consist of the following:⁷⁵

- Provides for the integration between reward policies, systems and key strategies for growth and improved performance of the organisation.
- Underpins the organisations values, such as innovation and quality
- Fits the culture and the management style
- Drives and supports certain behaviours. Indications shall be made to the employees that certain behaviour shall be rewarded.

⁷³ Armstrong, p. 12.

⁷⁴ Kempton, p. 53, discusses these issues shortly.

⁷⁵ Armstrong, p. 11.

- Provides with the all-important competitive edge in order to attract and retain the most qualified workforce.
- Enables the organisation to obtain value for money from the reward system.

As I have stated above the reward strategy can be an important tool to change the business. But if the company is looking for the best outcome of the strategy the management shall integrate it with the human resource strategies in the company. The reward strategy shall work as a complement to the other human resource strategies.⁷⁶ The general human resource strategy deals with how the skills in the company can be increased while the reward strategy will focus on the motivation of people and make them develop their skills and reward them when they have acquired the skills. The reward strategy shall also be focused on how certain performances shall be rewarded; for instance the criteria for pay increase.

Before setting up the reward strategy we have to look into the rules that might come into effect. This can regard company law, tax rules and the law of contracts, see below 7.1.2.

7.1.1 Components of the Reward Strategy⁷⁷

This is basically about finding the right mix between financial and non-financial rewards in order to fit the organisation's needs. The components of the reward system are dependent on what the company and the management want to achieve with the system.⁷⁸ Is it just rewarding or is it a motivation force, retention force or used as a recruitment instrument? Of course the company can choose from a wide range of different types of rewards, but I am only going to point out a few of them. More important is the purpose with using a component, i.e. why are we using this type of reward? It is very significant that the rewards not are handed out randomly. The components can be concerned with.

- Motivate and reinforce superior behaviour.
- Development of performance-driven pay structures that are competitive on the market.
- Ensuring that the reward system is used to convey messages about the expectations and values of the organisation.
- Find a good balance between reward for the individual and organisational performance.
- Set up a reward system that consists of the best mix of financial and non-financial rewards and employee benefits.
- Achieve flexibility in order to make the administration easier in a fast-changing environment.
- The reward system shall be fitted to organisational needs as well as individual.
- Achieve certain taxation for the company and for the employee.
- Use of legal tools as a motivating force.

7.1.2 Monetary Rewards

There are a number of monetary rewards that can be handed out to the employees as an incentive. In this section I will treat the basic and most commonly used monetary rewards. Below, in section 7.1.2.1, I will

⁷⁶ Armstrong, p. 12.

⁷⁷ Based on Armstrong, p. 11.

⁷⁸ Wilson, p. 20-23.

discuss rewards that are related to valuable documents. I have made this division due to the formal requirements in the event valuable documents are handed out as rewards.

Base pay. This is the regular income that the employee receives just for turning up at work, sometimes it is called “show-up pay”. The level of the base pay reflects the degree of responsibility and accountability that stands with the employee. And it is a measure of how much the market is willing to pay for a certain competence. The problem with a high base pay is that it is difficult to reduce the costs in the company by reducing the base pay since then people has to leave the company. According to my studies, the base pay is the most commonly used reward and probably the first thing an employee asks for.

Merit pay or variable pay. This represents the pay that reflects the individual performance of the employees. It is based on the idea that employees that perform well are going to be rewarded to a greater extent than employees that perform average or below average. The problem with this kind of pay is that competition increases between the employees and collaboration is not encouraged. The pay can also be related to the overall profit of the company, which acts as a motivating force.⁷⁹ Something that companies shall beware of is skill- or competency-based pay, since this is very expensive and requires substantial investments in extensive education programs. It also increases the total wage rate of the company.⁸⁰ The companies I have spoken to uses variable pay to some extent, but still it is the base pay that is the most important part. The variable pay is connected with different factors such as how much the single consultant or the entire project team charges the client.

Management bonuses. This is the payment to managers and executives. Often it is given in lump sum payments as commission on profit and it is determined by the financial outcome of the company. These bonuses are also used to keep key talents in the company, so even if the result of the company is not that good a bonus might still be paid. The benefit with the bonuses is that neither the employee nor the employer has to take any financial risks.

Team rewards. This is a very interesting and important type of reward especially for the companies in the information technology business. As I have said before in chapter 4.1, the organisation of these companies are flat and most of the work is done in project teams. Therefore it would be wise to work out a system, where the company rewards the entire team, and not only individuals. Variable pay that is connected to the overall team performance would motivate and increase collaboration within the team, and thereby help the overall performance of the company.⁸¹

Bonus pools. This instrument is very common among the companies that I have spoken to during my research. The bonus pool is applied for everybody in the company. But it is still hard to hand out the bonuses in a fair way, since all the work is done in teams, and it is hard to know who is responsible for what. The projects are also spanning over the boarders and goes into each other. The companies also feel that it is hard to set up a reward system that is fair and equitable. The reward system must not create conflicts within the company. A complicated reward system can have a number of negative effects. For example that employees don't help each other since there is a risk they would loose their own bonus. There is a great risk of sending costs to other

⁷⁹ Kempton, p. 65.

⁸⁰ Wallace & Crandall, p. 167.

⁸¹ Wallace & Crandall, p. 174.

departments and other employees in order to receive a larger bonus. If there is going to be a bonus-system it shall apply for all the employees, both administrative personnel and managers.

7.1.2.1 Monetary Rewards related to Valuable Documents

An effective way of reaching the corporate goals is to implement a reward system, which is based on valuable documents. This means that the key persons that are supposed to receive these types of rewards have the same goals as the stockholders, i.e. achievement of a positive development of the stock value. The instruments will also be helpful in creating additional stockholder's value. I will discuss relevant instruments to achieve this. I will also shortly discuss the taxation of these instruments.

Rewards in form of options and other stock-related instrument is very interesting and can be very effective, especially to key persons in the company. The value of this reward is based on the performance of the company in the eyes of the stock market and the investors. The purpose of a program of this sort is to give the employees a stake in the company, i.e. ownership. A stock related program is also very efficient in retaining personnel since the personnel will lose the gain of the stock related instruments if they leave the company.

Stock related programs have, despite this, a very significant problem. They can only be used in companies, which have a growth potential.⁸² If the business is declining the stock related program could have the opposite effect. Personnel will most certainly leave the company when they see that the value of their stocks or options not increases. The stock related programs only have a positive effect in good times for the business. When setting up the reward system, it might be a good idea to combine the stock related program with for instance bonus pay systems in order to avoid the effects of a decreasing stock value. The stock market is also very sensitive towards things that neither the employee nor the company can control, in this sense the stock related instruments are risky.

Stocks. Stocks in the company can be offered to the employee where they are employed. This is a very effective motivation force since the employees and the owners have the same goal, i.e. to have good increase of the value of the stocks. Stocks can be handed out either through a directed issue of new stocks⁸³ or through already issued stocks. The latter requires involvement of a third party, since companies according to Swedish law not are allowed to own their own stock.⁸⁴

*Convertible securities.*⁸⁵ The Swedish Companies Act chapter 5 regulates these instruments and they are a good way to finance the business and could also work as an incentive. They are basically a promissory note, but they are really a mix between a note and a stock. The formal decision to issue convertibles is taken by the annual year meeting according to the Swedish Companies Act chapter 5 § 3, but the board of directors can also make the decision, chapter 5 § 8 together with *Leo-lagen*.⁸⁶ The decision shall contain interest rate and

⁸² In economic theory we can find four phases of a company. 1. Introduction, 2. Growth, 3. Maturity, 4. Decline. These phases arrive depending on how the company looks. It is not very wise to introduce an extensive option-program if the company is in phase 4.

⁸³ Consideration to *Leo-lagen* has to be taken.

⁸⁴ Swedish Companies Act, Chapter 7 § 1. This might however change. A government bill has been presented with the contents to allow purchase of own stock, prop. 1999/2000:34.

⁸⁵ Konvertibla skuldebrev och skuldebrev förenade med optionsrätt till nyteckning.

⁸⁶ SFS 1987:464, for further discussion see Lombach & Cederlund.

running time. The stockholders have precedence to acquire the convertibles, Swedish Companies Act chapter 5 § 2. This regulation can be diverged from according to section 2 of the paragraph. The convertibles mean a right for the holder to completely or partly exchange the debt for stocks in the company, Swedish Companies Act, chapter 5 § 1. The decision to exchange the convertible can only be made by the creditor (the employee); the company has no right to force an exchange. The company can however terminate the contract if that is agreed upon. The creditor will then get paid for his debt according to the contract. The holder of the convertible can freely dispose over it, but limitations to this right are common by agreement.

The financial effect of the convertible for the company could be discussed from a stockholder's perspective. When the holders of the convertible exchange it the company's debt will be transformed to equity capital. This means that the existing stockholder's ownership will be diluted in favour of the employees. This is a very significant problem from a formal perspective too, since the existing stockholders are the ones that decide whether to introduce the convertible or not and it requires a high majority of votes.⁸⁷

Options. These instruments are different to stocks and convertibles. A contract regarding options are not regulated by Swedish company law; the contents of the option is based on an agreement and thereby regulated by the Contracts Act. An option is defined as a right, not an obligation, to purchase certain goods in the future to a specified price.⁸⁸ In an incentive program the goods are stocks. The option has a premium and the option will only be used if the price of the stock exceeds the premium. If this not is the case the option will lapse, since the stocks are cheaper to buy at the stock market.

Call options. This instrument gives the holder an option to buy stocks in the company. As I have said above a Swedish stock company is not allowed to be holder of its own stocks. Normally the main stockholder issues call options for the market value.⁸⁹ The calls are then given from the company to the employees. It is the company that pays the stockholder for the calls. Since all the stocks already are issued no dilution will occur and the present stockholders will not have precedence. The board of directors can decide about the issuing of calls.

Subscription option. Option contracts can only be issued together with a note, Swedish Companies Act, chapter 5 § 1. The note can however be separated from the option and become a naked option. There are no regulation that treats the relationship between the note and the number of stocks that can be issued when the option is exchanged. The regulations about the stockholder's precedence apply here to, as they did to convertibles. The holder uses the option by transforming it into stocks. Normally the employees are not willing to lend money to the company and receive a note. Therefore it should work better as an incentive to issue the options without the connection to the note.⁹⁰

Synthetic options. If the employer does not want to spread the ownership in the company he has the opportunity to launch a program with synthetic options. This means that no real stocks are involved. Instead the employer and the employee makes an agreement, which says that the employee shall receive money

⁸⁷ 90 % according to Leo-lagen.

⁸⁸ The definition can be found in SFS 1992:543.

⁸⁹ Samuelsson, p. 467.

⁹⁰ Rutberg & Rutberg, p. 34.

correspondent to the increase of the stock value, i.e. the holder of a synthetic option can not purchase any stocks. The value of the synthetic options is calculated through a special formula.⁹¹

*Employee stock options.*⁹² One possibility to achieve an efficient reward is ownership, see above chapter 7.1.1. This can be made by employee stock options, which means that the employee receives or acquires an opportunity to achieve stocks in the company. In Sweden this method has not been used to a very great extent due to tax reasons, some companies though, which I have talked to uses a employee stock option program towards senior consultants.

The main purpose with an employee stock option program is to connect the employees closer to the company. With an employee stock option it is meant a right for the employee in the future to acquire stocks in the company to an in advance determined price. The right presupposes that the employee cannot dispose over the option during the employment and he or she has to be employed when it is time to transform the option into stocks. These conditions are necessary from the employer's point of view in order to tie the employee closer to the company. The tax consequences could be burdensome, see below 7.1.2.2, but still the option program makes the employee to feel, as they are a part of the company to a greater extent, and if things work out real well, the employee might make more money this way than by a ordinary salary.

All option programs can become very expensive for the company therefore it could be wise to introduce some security barriers such as hedges in order not to ruin the company.⁹³ This means that a maximum value is set to the options.

7.1.2.2 Tax Consequences

Tax law is a complicated matter and I will only present a general picture of the tax consequences that might occur when using instrument that are connected to valuable documents. The main question is here to decide if the reward comes from the line of work or capital gains.⁹⁴ It could be classified as the line of work since the income is derived from the employment. The taxation is dependent on the classification of the instrument involved. If the instrument can be defined as an independent valuable document capital-gains tax will be added. And to determine if the instrument is a valuable document we have to assess the connection to the employment. If there are conditions connected to the employment, such as limitation in the right to dispose over the instrument, taxation will be ordinary income tax.⁹⁵

In the event the employee purchases the option for a lower price than a theoretical calculated value⁹⁶ the point of taxation will be at the time of purchase. The company will pay social securities on this benefit. What the parties normally do is to set the price to the same level as the theoretical value and there will be no benefit.

⁹¹ The formula is called Black & Scholes (B & S). There is no need to analyse the formula in detail in this essay.

⁹² <http://www.sito.se/main.asp?typ=amne&id=224> 1999-10-27.

⁹³ Rutberg & Rutberg, p. 34.

⁹⁴ There are different tax-percentages. Capital-gains tax 30 % while ordinary income tax related to the line of work approximately 57 %.

⁹⁵ Lombach & Cederlund, p. 199.

⁹⁶ For instance with the Black & Scholes modell.

As I have said, tax law is a complicated matter but important when forming the conditions of the reward strategy. It is possible to form the conditions in the rewards strategy in order to achieve capita-gains tax instead of ordinary income tax.⁹⁷

In the future this situation might change. Tax law is constantly changing due to political winds, and in the future employee options may be a good way to reward the employees, but for now the company management has to investigate the tax consequences thoroughly before introducing an extensive program related to valuable documents. It could be better just to use an ordinary bonus-system. The uncertainty and the lack of knowledge about stock related programs are comprehensive in the information technology business.⁹⁸ But the companies would not wait to long to launch a program if the tax situation changes. It is quite clear that it is a very good way of rewarding and motivating the personnel, whatever status they have.

7.1.3 Non-monetary Rewards

In addition to the monetary rewards the company can include other benefits for the employees that shows that the company care for them. In Sweden many benefits comes out of law, such as pensions, sick pay and medical insurance. But despite this the employer always can help the employee and make them more secure with paying them with these kinds of benefits.

Promotions. This is an effective form of reward. Humans have a natural behaviour of climbing a ladder of success and strive for new challenges. If the employee excels his or hers employment, the management should promote this individual in order to make him or her satisfied. The employees shall feel that there is a progress in their working life. This kind of reward can be difficult to use in an information technology company, since the job grades often are very few in the flat organisation and adhocracy, se above section 5.4. It is also hard to exactly revise what every employee has done since a lot of the work is done in projects and it is the team that is taking the credit for the success.

Employee recognition. This instrument is hardly used by anyone.⁹⁹ And if it is used it is not very effective and have almost no impact on the overall business. But common sense says that an employer always shall recognise the work of his employees, even though the impact on the company is inconsiderable.

Another important motivating factor for the employees is that they feel development at work, therefore the employer should offer a few training days or weeks a year in order to achieve this development. This will most certainly improve the overall performance of the company too.¹⁰⁰ All companies in my study emphasise the importance of good working conditions. This is perhaps more important than the money. The employees must feel that they can develop their skills within the company and to do this is very important to work with other individuals and learn from them. Considerable resources are also put into different education programs, both external and internal. The employees shall motivate each other through an exchange of knowledge. The employees are also encouraged with minor rewards such as movie tickets, dinners, team building events and other social activities. Included in these minor rewards could also be insurance, different kinds of medical treatment, membership of health clubs, bonuses for recruitment and for development of competence or skill.

⁹⁷ Lombach & Cederlund, p 200.

⁹⁸ <http://www.sito.se/main.asp?typ=amne&id=224> 1999-10-27.

⁹⁹ The meaning is that no one really uses recognition such as “employee of the year” and so forth.

¹⁰⁰ Kempton, p. 68.

According to an article in the magazine IT.BRANSCHEN high wages no longer allures the most competent personnel.¹⁰¹ That high wages is the key to the most competent personnel is a myth. There are four reasons that are more important than a high wages: challenges at work, opportunities to personal development, the contents of work and the opportunities to make a career. The key to find competent personnel is, according to the article, image and soft values. Incentives that can make the competent personnel to join the company can be:

- Trendy location of offices, preferably in the centre of the city.
- Home services such as cleaning and laundry.
- Create job opportunities for the rest of the family.
- Fun and personal development at work.
- The bonus pool shall be available for everyone since all employees in the company are depending on each other and strive towards the same goal.
- Great variety among the employees and in the company culture.
- Big challenges.
- Ownership through options or stocks.
- Strong trademarks both regarding the company and its products.
- Responsibilities for the personnel.

In one company I have talked to, it has been discussed the opportunity for the employees to start own business with the help of the employer. This could be about to help out to launch an idea that the employee has come up with during his or her work for the company. But nothing had really happened in this area. But this could work as a very good incentive for the employees and at the same time the employer can make the business grow with help of the employees.

As we have seen a reward system can contain all sorts of instrument depending on what the company wants to achieve. Therefore it is important for the management to be aware of the effect of the reward system and use it in an effective way and obtain the competitive advantages the system can bring to the company.

7.2 *Implementation of the Reward Strategy/System*

In order to achieve the objectives stated above the implementation of the reward strategy has to be done very thoroughly. The management has to be aware of that the reward system is going to last for a long time in order to be successful and fulfil its purposes.

There are a number of factors and circumstances that effects the implementation. First of all we have the level of rewards. Shall the company pay high reward or just average or might even be satisfied with low pay. Conditions that have to be consider is how the market situation appears to the company. Does the company need high level of performance from its employees? What does the competition situation for good quality people look like – fierce or non-existence? Can the company afford to be a high payer or shall it rely on non-monetary rewards and promote softer values?

¹⁰¹ <http://www.idg.se/it.branschen/skyddat/nr1599/rep1.htm> 199-12-16.

The company must also think of how many steps of pay-levels it needs or the pay hierarchy. This is influenced by the culture of the company. In a flat organisation as the companies in the information technology business many levels may not be required. Instead the pay is based on different bonuses related to performance.

Secondly we have the relation between market rates and equity. This can present a rather complicated problem for companies in the information technology business since the environment is fast changing and the employees are aware of this constant change. The question here is whether the company shall pay after equity or follow the market rates. If the company do poorly, it might be difficult to follow a strategy or philosophy that states that the pay or reward shall be equitable. The main thing here is how the company can keep and recruit the best staff.¹⁰²

A third consideration that has to be made is to what extent the rewards shall be linked with performance. If it is, it might reduce collaboration and mean harmful competition between the employees.¹⁰³

7.3 Efficient Reward Systems¹⁰⁴

Before the management decides if they are going to use a reward system they must make an effective system. The people must feel rewarded for what they actually have done. The first step to take is to be aware of human behaviour;¹⁰⁵ the management has to be aware of how people react in different types of environment. What is it that makes the personnel do its best? Is it the stick or the carrot?

Wilson has developed a SMART model in order for the management to know what to do.¹⁰⁶

1. The rewards shall be *specific*. The performer must know on what criteria the performance evaluation is based. Too often these criteria are vague and unspecific; the performer is in need of goals and feedback. The personnel must also know what has to be done in order to achieve the company goals.
2. The reward must also have an impact on the performer's behaviour in order to be *meaningful*. The management must follow the work and find out when goals are set or not set. Thereafter they will have to act immediately; the performer needs a respond to what he or she has done. This shall be done during the year and not only at the end of the year. The reward shall also be meaningful in the sense that the personnel, from their perspective, feel valued.
3. The reward shall be able to get by a reasonable effort; i.e. it shall be *achievable*. The goals set by the management shall be able to reach and not only after a long time with hard and ambitious work but after a reasonable period of time. Otherwise it is very easy to give up. The purpose with the reward is that we shall increase a certain behaviour not reduce it by setting too high and difficult to achieve goals.

¹⁰² Armstrong, s. 15.

¹⁰³ Wilson, p. 26.

¹⁰⁴ Wilson, s. 208-209.

¹⁰⁵ As I have stated before, the theories about human behaviour exceeds the scope of this essay, why I am not commenting on them.

¹⁰⁶ Wilson, p. 48-51.

4. The reward system must be *reliable*. It must be consistent with its purpose and the whole process around the rewards must be managed in a cost-effective manner.
5. The reward shall be *timely*. As soon as an achievement is reached the management must provide feedback, reinforcement and rewards. Employed usually works harder the more often the can see the results of what they have done. So there should be a clear alignment between the time of achieving the goals and receiving the reward.

This was a brief look at Wilson's SMART model. But this could be put in another way. A reward system is successful when it encourage collaboration between the employees in order to serve the customers in the best ever way. Thereby the reward system has increased the company's competitiveness. The reward system shall encourage people to take initiatives and by doing so they shall receive value for their efforts. Money is not the only solution for achieving this objective. The rewards can be given non-monetary as well as monetary. It is important to create a win-win situation between the employer, employee and the customers.

8 Conclusions

The control and protection of knowledge is a delicate problem for the companies in the information technology business, since this all about dealing with humans. Humans are not machines. The management can actually not force the humans to something as they can do with machines. Humans have needs that have to be satisfied and all humans have different needs depending on their situation. This makes the control and protection of knowledge a very complicated matter from a management perspective. The old instruments to manage and control the personnel do not work as effective as they used to do. Therefore new instruments have to be found in order to achieve corporate goals and business goals as well. These instruments shall aim at both rewarding and motivate individuals, and at the same time add value to the company. The conglomerate of instruments shall in other words create a win-win situation between the company as an employer and the workforce.

In order to reach the goals of protecting and controlling knowledge the company shall form a strategy consisting of both legal and financial instruments. These instruments shall interact to achieve the goals, no instruments can stand on their own; they must be a part of and implemented in the overall corporate strategy. The strategy must be formed in consideration to laws, economics and other circumstances that effect the company. The management must also consider the company's own possibilities to effect this environment. What is the company's ability to effect the environment, both external and internal?

One could always ask the question what happens with the control and protection of the knowledge when the company uses another workforce than ordinary employees such as independent subcontractors. Can the company thereby achieve greater control and protection by not being forced to apply traditional employment law, since the relationship is based on an agreement? Can the company trust independent subcontractors? They will not likely accept any imposing contractual conditions without a significant payment. What is the best solution: pay employees or independent subcontractors not to disclose any company-related material? These questions are not easy to answer and I have only treated the relationship between employer and employee, but the management must be aware of the possibility to hire independent consultants too. This can

cause great opportunities but problem as well, such as company loyalty does not exist and the subcontractors can work for competitors at the same time.

The conglomerate of instruments can consist of both legal and financial instruments, which has been discussed above. The legal instruments, such as different contractual conditions, often represent a threat, while the financial instruments represent an opportunity. The legal instruments have a limitation since the strategic consequences can be burdensome to the company, therefore the use of legal instrument shall be used with caution. I am not saying that the company shall stop using legal instruments to control and protect knowledge, in fact I can recommend the company to use them, but only if they are aware of the consequences. The company must however be prepared to pay for limiting the employee's rights and opportunities. In other words, the legal instruments have to be completed with financial instruments, such option programs or bonuses. The legal and the financial instruments shall interact to achieve the most for both parties.

Before using the instruments mentioned above a careful evaluation must be done of the needs of the company. The use of the legal and financial tools can not be done randomly. There must be an exact evaluation of which instruments to use and when. This is one of the major problems for the information technology business today, the lack of structures and the lack of knowledge when to act. Too many decisions are made randomly. This has been one of the purposes of this essay to create a framework for the information technology company to work with.

The legal and financial instruments to control and protect knowledge are not the only ones to use to achieve the goals. The company shall also emphasise personal development and let the employees grow within the organisation. Let the personnel develop their own ideas and help them creating their own business, which the company can be a part of. Softer values must be able to grow within in the company; the employees shall feel that they are a part of a team, where everybody works for each other. These softer values have the same significance as legal and economic values and they the same effect at least in the long run.

It is not possible to recommend or propose an entire system to control and protect knowledge, since the information technology business is so fast changing and all the companies have different needs. An advice that I can give is to think twice before using any unknown instruments.

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